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APPLICATION	NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/878,246	5	06/12/2001	Young-Won Lim	P 281196 P00HA009/US	3785
909	7590	03/14/2005		EXAMINER	
		INTHROP, LLP	NALVEN, ANDREW L		
P.O. BOX 10500 MCLEAN, VA 22102				ART UNIT	PAPER NUMBER
				2134	
				DATE MAILED: 03/14/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

. —	Application No.	Applicant(s)					
Office Action Summers	09/878,246	LIM, YOUNG-WON					
Office Action Summary	Examiner	Art Unit					
	Andrew L Nalven	2134					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 12 Ju	ne 2001.						
•	action is non-final.						
3) Since this application is in condition for allowar	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) Claim(s) 1-7 is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.	5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1</u> is/are rejected.	Claim(s) <u>2-7</u> is/are objected to.						
7) Claim(s) <u>2-7</u> is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers		1					
9)☐ The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on 12 June 2001 is/are: a)	\boxtimes The drawing(s) filed on <u>12 June 2001</u> is/are: a) \boxtimes accepted or b) \square objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
<u> </u>	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form P1O-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a))-(d) or (f).					
a)⊠ All b)□ Some * c)□ None of:							
1. Certified copies of the priority documents		·					
2. Certified copies of the priority documents have been received in Application No.							
 Copies of the certified copies of the prior application from the International Bureau 	7	ed in this National Stage					
		ed.					
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Notice of Draftsperson's Patent Drawing Review (PTO-948) Fapel Ro(s)/Mail Date Notice of Informal Patent Application (PTO-152)							
Paper No(s)/Mail Date <u>3/11/02</u> . 6) Other:							

DETAILED ACTION

1. Claims 1-7 are pending.

Claim Objections

2. Claim 2 is objected to because of the following informalities: The claim contains the type "using a first a second subkeys respectively." Examiner suggests a correction to read "using a first subkey and a second subkey." Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Euyster US Patent No. 6,578,150 in view of Baji et al US Patent No. 4,825,287. Luyster teaches a block cipher method. Baji teaches a digital video signal processor.
- 5. With regards to claim 1, Luyster teaches an input buffering means for receiving a plain text block byte-by-byte and outputting a first and a second 32-bit plain text blocks in response to a first clock (Luyster, Figure 3 Items 50, 52, and 54), encryption means

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for performing time multiplexed encryption of the first and the second 32-bit plain text blocks in response to a clock thereby generating a first and a second 32-bit cipher text blocks (Luyster, Figure 3 Round 1, Items 84 and 86, column 5 lines 40-60), and output buffering means for receiving the first and the second 32-bit cipher text blocks in response to the second clock and outputting eight 8-bit cipher text blocks (Luyster. Figure 3 Item 88, 64 bits). Luyster fails to teach the use of two clocks for performing encryption of two blocks of plain-text data. Baji teaches the use of two clocks for performing encryption of two blocks of plain-text data (Baji, column 6 lines 50-68, phi 1 and phi 1). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Baji's method of using multiple clocks because it offers the advantage of helping reduce the amount of transistors or circuits needed to perform operations through time multiplexing (Baji, column 1 line 54 – column 2 line 11, column 2 lines 24-26).

Allowable Subject Matter

6. Claims 2-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art fails to specifically teach the unique feature of utilizing to separate clocks in the apparatus of "a cipher function unit for receiving the first and the Art Unit: 2134

second 32-bit plain text blocks from the input buffering means in response to the first clock, encrypting the first and the second 32-bit plain text blocks using a first and a second subkeys respectively, and outputting a first encrypted 32-bit block in response to the first clock and a second encrypted 32-bit block in response to the second clock." As such, the cited prior art fails to anticipate or render obvious the above cited claims.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L Nalven whose telephone number is 571 272 3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 571 272 3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Andrew Nalven